

The
**Delaware & Hudson
 Transportation
 Heritage Council**

is a group of organizations and individuals working to preserve the remnants of the canal and gravity railroad, as well as promote their history and relevance to the present.

The importance of the D & H Canal Co. to this area during the 1800s cannot be overstated. It supported the region economically and was instrumental in its growth and that of New York City.



The Gravity Railroad was engineered by John Jervis as a practical way to haul coal east over the Moosic Mountains. Extending from Carbondale to Honesdale, the original Gravity was sixteen miles long.

Starting from Carbondale's coal fields (elevation 1,200 feet), the Gravity climbed to Rix's Gap (1,907 feet). Stationary steam engines winched the coal cars up several planes. At the summit they descended to Waymart (1401 feet), then on to Honesdale (975 feet) to the canal boats. Descending to Honesdale, loaded cars required no power, except gravity.

The Gravity was an engineering marvel and was so successful that it later was extended down the Lackawanna valley and carried passengers. Without the ingenious Gravity there would have been no coal to haul on the canal.



**Locks
 were
 Key**

*Lock 58
 Mongaup,
 NY*

A canal is a long man-made waterway whose level rises and falls by means of locks to allow for two-way boat traffic. There were 108 locks along the canal route, each controlling about 10 feet of water level.

After the last enlargement one person alone could operate the lock doors and gates. Using chains the lock tender controlled both ends of the lock from a single location.

Most of the locks were made of dried-laid stone, lined with lumber. The locks at High Falls were built of quarry cut stone. Only three inches separated the boat from the lock walls. Canal men wrapped ropes around snubbing posts at each lock to keep the boats and lock walls apart.

Each lock had a bypass flume to divert surplus water around the lock. Some were open, some were tunnels. Many of the locks remain until today.



www.dhthc.org



Aqueducts

*Roebling
 Delaware
 Aqueduct*

The canal crossed over rivers and streams on aqueducts and culverts. There were many along the route, usually made with huge wooden beams. Across the four largest rivers (Lackawaxen, Delaware, Neversink and Rondout) the length of the spans required something different.

Engineer John Roebling perfected his "wire rope" cable during the canal expansion. The D & H paid him \$100,000 to build four suspension aqueducts. The Neversink Aqueduct was the longest single span bridge of its kind when completed.

The pictured Delaware Aqueduct survives and today is a National Engineering Landmark. Roebling's workmanship endured. When the National Park Service restored the Delaware Aqueduct as a road bridge, inspectors found the original wire rope cabling to be in perfect shape!

Again the D & H used cutting edge technology of the day.

The Future

Many miles of towpath have been restored and more work needs to be done. In 2013 a volunteer group erected a 66' bridge (pictured) across a breach in the towpath trail.

You can help. Volunteer your time or make a tax deductible contribution. Learn more: visit one of the member museums, take a walk along the towpath, scan the QR code or visit www.dhthc.org to contact one of our member organizations.

The Delaware & Hudson Canal, 1828-1898



The
D&H
Canal
&
Gravity
RR
Map
ca 1865

The D & H Canal was 108 miles long, stretching from Honesdale, PA to Eddyville, NY near the Hudson River. It followed the valleys of several rivers and was built without machinery, using just man and animal power.

Several sections went through rocky areas or along cliff faces abutting rivers, where black powder was used to blast out the canal and towpath. Many men lost lives and limbs in this rough work.

Other places required skilled stone masons who erected walls up to 30 feet high which could withstand water pressure and extreme weather. Many of these walls remain today.

During its working history the canal was enlarged three times. Boat capacity rose from 20 to 140 tons. Lakes were created or enlarged to feed water into the canal. Horses were replaced by mules and telegraph wires eventually followed the towpath.

After a run of 70 years the canal was closed and abandoned, replaced by more efficient railroads. However, the towns that sprung up as a result of the canal remain until today.

